WE CLAIM:

1. A compound comprising the formula:

$$G-(\overset{\overset{R_7}{|}}{\underset{\underset{R_8}{|}}{C}})_n-[M_1]_a-\left[\overset{\overset{Y_1}{\|}}{C}\right]_b-\left[\overset{\overset{R_1}{|}}{\underset{\underset{R_2}{|}}{C}}\right]_c-[M_2]_d-\left\{\left[\overset{\overset{R_3}{|}}{\underset{\underset{R_4}{|}}{C}}\right]_e-[M_3]_f\right\}_g-\left[\overset{\overset{R_5}{|}}{\underset{\underset{R_6}{|}}{C}}\right]_h-[M_4]_i-\overset{\overset{Y_2}{\|}}{C}-B \qquad (I)$$
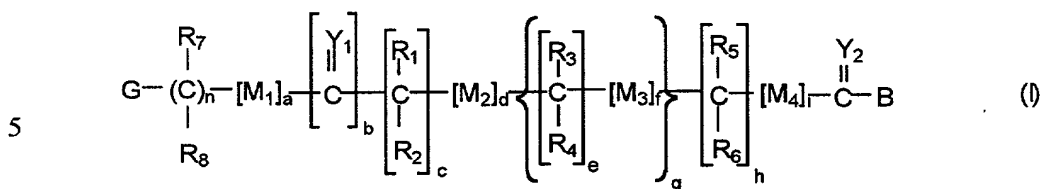
wherein:

G is a linear or branched polymer residue;

Y_1 and Y_2 are independently O, S, or NR_9;

M_1-M_3 are independently O, S, or NR_{10},

M_4 is X or Q;

wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from $C(=Y_2)$;
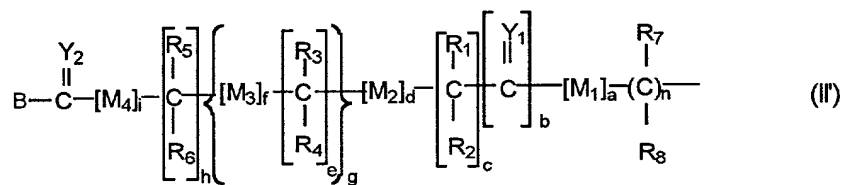
B is a residue of an amine-containing moiety or a residue of a hydroxyl-containing moiety;

R_{1-10} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls and substituted C_{1-6} heteroalkyls;
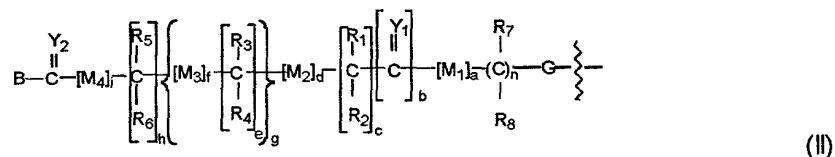
a, b, c, d, e, f, g, h, i and *n* are each independently zero or a positive integer.

2. The compound of claim 1, wherein G includes a capping group A, selected from the group consisting of hydrogen, CO_2H, C_{1-6} alkyl moieties, and
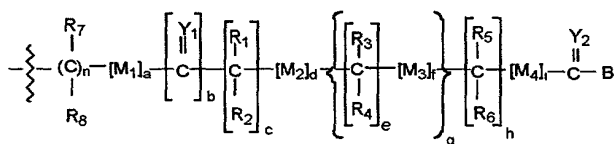
$$B-\overset{\overset{Y_2}{\|}}{C}-[M_4]_i-\left[\overset{\overset{R_5}{|}}{\underset{\underset{R_6}{|}}{C}}\right]_h-\left\{[M_3]_f-\left[\overset{\overset{R_3}{|}}{\underset{\underset{R_4}{|}}{C}}\right]_e\right\}_g-[M_2]_d-\left[\overset{\overset{R_1}{|}}{\underset{\underset{R_2}{|}}{C}}\right]_c-\left[\overset{\overset{Y_1}{\|}}{C}\right]_b-[M_1]_a-(\overset{\overset{R_7}{|}}{\underset{\underset{R_8}{|}}{C}})_n- \qquad (II')$$

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3. A compound of claim 2, of the formula:

$$B-\overset{\overset{Y_2}{\underset{||}{}}}{C}-[M_4]_i-\left[\overset{R_5}{\underset{R_6}{C}}\right]_h\left\{[M_3]_f-\left[\overset{R_3}{\underset{R_4}{C}}\right]_e\right\}_g[M_2]_d-\left[\overset{\overset{R_1}{|}}{\underset{R_2}{C}}\overset{\overset{Y_1}{\underset{||}{}}}{C}\right]_c[M_1]_a-\overset{R_7}{\underset{R_8}{(C)}}_n-G-\Big\}-$$

$$-\Big\{-\overset{R_7}{\underset{R_8}{(C)}}_n-[M_1]_a-\left[\overset{Y_1}{\underset{||}{}}C\right]_b\left[\overset{\overset{R_1}{|}}{\underset{R_2}{C}}\right]_c[M_2]_d\left\{\left[\overset{R_3}{\underset{R_4}{C}}\right]_e-[M_3]_f\right\}_g\left[\overset{R_5}{\underset{R_6}{C}}\right]_h[M_4]_i-\overset{\overset{Y_2}{\underset{||}{}}}{C}-B$$

(II)

4. The compound of claim 1, wherein a, b, c, d, e, f, g, h, i and n are independently zero, one or two.

5. The compound of claim 1, wherein Y_1 and Y_2 are both O.

6. The compound of claim 1, wherein M_2 is NH and d is one.

7. The compound of claim 1, wherein R_7 and R_8 are both H.

8. The compound of claim 1, wherein n is 1.

9. The compound of claim 1, wherein a is 0.

10. The compound of claim 1, wherein a is 1.

11. The compound of claim 1, wherein c is 0.

12. The compound of claim 1, wherein g is 2, M_3 is O, e is 2, f is 1 and R_3 and R_4 are H.

13. The compound of claim 12, wherein b, d, h and n are 1, R_5 and R_6 are H and M_2 is NH.

14. The compound of claim 12, wherein b, d and n are 1, M_2 is NH and R_3 and R_4 are H.

15. The compound of claim 1, wherein B is a residue of an amine - containing moiety.

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16.   The compound of claim 15, wherein said amine-containing moiety is
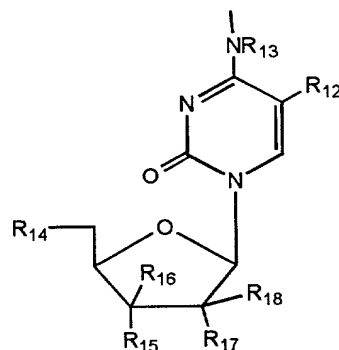
wherein

R_{12-13} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, halo, substituted aryls, aralkyls, C_{1-6} heteroalkyls, substituted C_{1-6} heteroalkyls;

R_{14-18} are independently selected from alkoxy, e.g. OR_{19} or, in the alternative, H, OH, N_3, NHR_{20}, NO_2 or CN, fluoro, chloro, bromo, iodo, where R_{19-20} are independently selected from the same group which defines R_{12-13}.
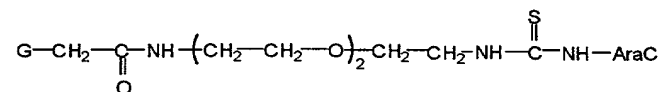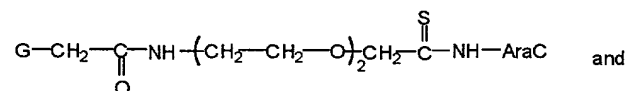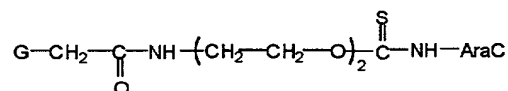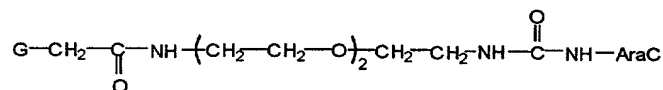
17.   The compound of claim 1, wherein G is $O-(CH_2CH_2O)_x$ or $O-(CH(CH_3)CH_2O)_x$, wherein x is the degree of polymerization.

18.   The compound of claim 17, wherein G is $O-(CH_2CH_2O)_x$ and x is a positive integer selected so that the weight average molecular weight is at least about 20,000.

19.   The compound of claim 18, wherein G has a weight average molecular weight of from about 20,000 to about 100,000.

20.   The compound of claim 21, wherein G has a weight average molecular weight of from about 25,000 to about 60,000.

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21.   A compound of claim 1, selected from the group consisting of:

$$G-CH_2-\underset{\displaystyle O}{\overset{\displaystyle O}{C}}-NH-(CH_2-CH_2-O)_2\overset{\displaystyle O}{C}-NH-AraC$$

$$G-CH_2-\underset{\displaystyle O}{C}-NH-(CH_2-CH_2-O)_2-CH_2-\overset{\displaystyle O}{C}-NH-AraC$$
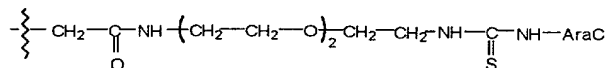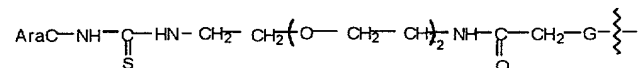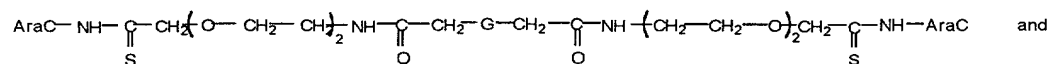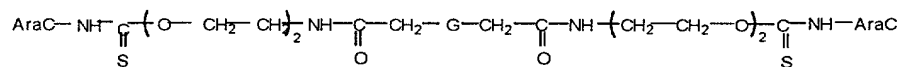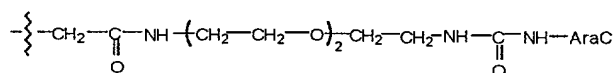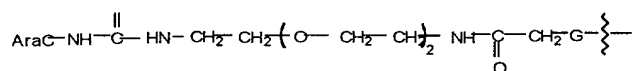
$$G-CH_2-\underset{\displaystyle O}{C}-NH-(CH_2-CH_2-O)_2-CH_2-CH_2-NH-\overset{\displaystyle O}{C}-NH-AraC$$

$$G-CH_2-\underset{\displaystyle O}{C}-NH-(CH_2-CH_2-O)_2-\overset{\displaystyle S}{C}-NH-AraC$$

$$G-CH_2-\underset{\displaystyle O}{C}-NH-(CH_2-CH_2-O)_2CH_2-\overset{\displaystyle S}{C}-NH-AraC \quad and$$

$$G-CH_2-\underset{\displaystyle O}{C}-NH-(CH_2-CH_2-O)_2-CH_2-CH_2-NH-\overset{\displaystyle S}{C}-NH-AraC \quad .$$

22.   A compound of claim 3, selected from the group consisting of:

$$AraC-NH-\underset{\displaystyle O}{C}-(O-CH_2-CH_2)_2-NH-\underset{\displaystyle O}{C}-CH_2-G-CH_2-\underset{\displaystyle O}{C}-NH-(CH_2-CH_2-O)_2-\underset{\displaystyle O}{C}-NH-AraC$$

$$AraC-NH-\underset{\displaystyle O}{C}-CH_2-(O-CH_2-CH_2)_2-NH-\underset{\displaystyle O}{C}-CH_2-G-CH_2-\underset{\displaystyle O}{C}-NH-(CH_2-CH_2-O)_2-CH_2-\underset{\displaystyle O}{C}-NH-AraC$$

$$AraC-NH-\overset{\displaystyle O}{C}-HN-CH_2-CH_2-(O-CH_2-CH_2)_2-NH-\underset{\displaystyle O}{C}-CH_2-G-\}-$$

$$-\{-CH_2-\underset{\displaystyle O}{C}-NH-(CH_2-CH_2-O)_2-CH_2-CH_2-NH-\underset{\displaystyle O}{C}-NH-AraC$$

$$AraC-NH-\underset{\displaystyle S}{C}-(O-CH_2-CH_2)_2-NH-\underset{\displaystyle O}{C}-CH_2-G-CH_2-\underset{\displaystyle O}{C}-NH-(CH_2-CH_2-O)_2-\underset{\displaystyle S}{C}-NH-AraC$$

$$AraC-NH-\underset{\displaystyle S}{C}-CH_2-(O-CH_2-CH_2)_2-NH-\underset{\displaystyle O}{C}-CH_2-G-CH_2-\underset{\displaystyle O}{C}-NH-(CH_2-CH_2-O)_2CH_2-\underset{\displaystyle S}{C}-NH-AraC \quad and$$

$$AraC-NH-\underset{\displaystyle S}{C}-HN-CH_2-CH_2-(O-CH_2-CH_2)_2-NH-\underset{\displaystyle O}{C}-CH_2-G-\}-$$

$$-\{-CH_2-\underset{\displaystyle O}{C}-NH-(CH_2-CH_2-O)_2-CH_2-CH_2-NH-\underset{\displaystyle S}{C}-NH-AraC$$

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23. A compound of claim 1, selected from the group consisting of:

$$G-CH_2-\underset{O}{\overset{O}{C}}-NH-(CH_2-CH_2-O)_2-\underset{O}{\overset{O}{C}}-B$$

$$G-CH_2-\underset{O}{\overset{O}{C}}-NH-(CH_2-CH_2-O)_2-CH_2-\underset{O}{\overset{O}{C}}-B$$

$$G-CH_2-\underset{O}{\overset{O}{C}}-NH-(CH_2-CH_2-O)_2-CH_2-CH_2-NH-\underset{O}{\overset{O}{C}}-B$$

$$G-CH_2-\underset{O}{\overset{O}{C}}-NH-(CH_2-CH_2-O)_2-\underset{S}{\overset{O}{C}}-B$$

$$G-CH_2-\underset{O}{\overset{O}{C}}-NH-(CH_2-CH_2-O)_2-CH_2-\underset{S}{\overset{O}{C}}-B \qquad \text{and}$$

$$G-CH_2-\underset{O}{\overset{O}{C}}-NH-(CH_2-CH_2-O)_2-CH_2-CH_2-NH-\underset{S}{\overset{O}{C}}-B \qquad .$$

24. A compound of claim 3, selected from the group consisting of:

$$B-\underset{O}{\overset{O}{C}}-(O-CH_2-CH_2)_2-NH-\underset{O}{\overset{O}{C}}-CH_2-G-CH_2-\underset{O}{\overset{O}{C}}-NH-(CH_2-CH_2-O)_2-\underset{O}{\overset{O}{C}}-B$$

$$B-\underset{O}{\overset{O}{C}}-CH_2-(O-CH_2-CH_2)_2-NH-\underset{O}{\overset{O}{C}}-CH_2-G-CH_2-\underset{O}{\overset{O}{C}}-NH-(CH_2-CH_2-O)_2-CH_2-\underset{O}{\overset{O}{C}}-B$$

$$B-\underset{O}{\overset{O}{C}}-HN-CH_2-CH_2-(O-CH_2-CH_2)_2-NH-\underset{O}{\overset{O}{C}}-CH_2-G-\{-$$

$$-\}-CH_2-\underset{O}{\overset{O}{C}}-NH-(CH_2-CH_2-O)_2-CH_2-CH_2-NH-\underset{O}{\overset{O}{C}}-B$$

$$B-\underset{S}{\overset{O}{C}}-(O-CH_2-CH_2)_2-NH-\underset{O}{\overset{O}{C}}-CH_2-G-CH_2-\underset{O}{\overset{O}{C}}-NH-(CH_2-CH_2-O)_2-\underset{S}{\overset{O}{C}}-B$$

$$B-\underset{S}{\overset{O}{C}}-CH_2-(O-CH_2-CH_2)_2-NH-\underset{O}{\overset{O}{C}}-CH_2-G-CH_2-\underset{O}{\overset{O}{C}}-NH-(CH_2-CH_2-O)_2-CH_2-\underset{S}{\overset{O}{C}}-B \qquad \text{and}$$

$$B-\underset{S}{\overset{O}{C}}-HN-CH_2-CH_2-(O-CH_2-CH_2)_2-NH-\underset{O}{\overset{O}{C}}-CH_2-G-\{-$$

$$-\}-CH_2-\underset{O}{\overset{O}{C}}-NH-(CH_2-CH_2-O)_2-CH_2-CH_2-NH-\underset{S}{\overset{O}{C}}-B \qquad .$$

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25.   A method of preparing a polymeric conjugate, comprising:

a)   reacting a biologically active moiety having an unprotected amine or hydroxyl group with a compound of the formula
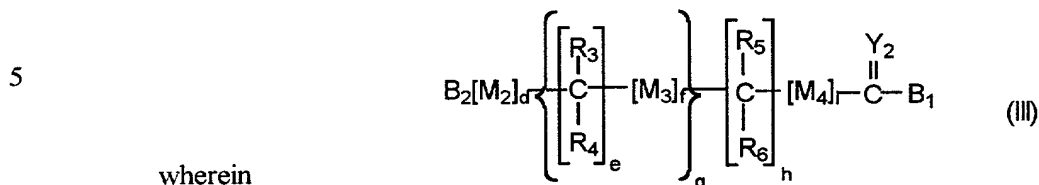
$$B_2[M_2]_d \left\{ \left[\begin{array}{c} R_3 \\ | \\ C \\ | \\ R_4 \end{array} \right]_e -[M_3]_f \right\}_g \left[\begin{array}{c} R_5 \\ | \\ C \\ | \\ R_6 \end{array} \right]_h [M_4]_i - \overset{\overset{\displaystyle Y_2}{\|}}{C} - B_1 \qquad \text{(III)}$$

wherein

B_1 is a leaving group capable of reacting with an unprotected amine or hydroxyl group;

B_2 is a cleavable protecting group;

Y_2 is O, S, or NR_9;

M_2-M_3 are independently O, S, or NR_{10},

M_4 is X or Q;

wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from $C(=Y_2)$;

R_{3-6}, R_9 and R_{10} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls and substituted C_{1-6} heteroalkyls;

$d, e, f, g, h,$ and i are each independently zero or a positive integer;

to form a protected intermediate of the formula:
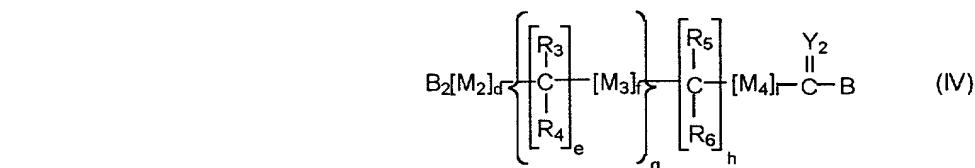
$$B_2[M_2]_d \left\{ \left[\begin{array}{c} R_3 \\ | \\ C \\ | \\ R_4 \end{array} \right]_e -[M_3]_f \right\}_g \left[\begin{array}{c} R_5 \\ | \\ C \\ | \\ R_6 \end{array} \right]_h [M_4]_i - \overset{\overset{\displaystyle Y_2}{\|}}{C} - B \qquad \text{(IV)}$$
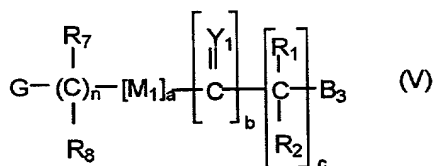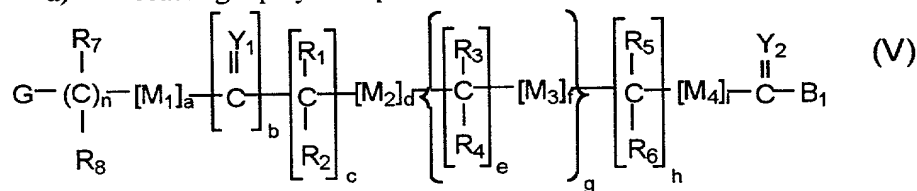
wherein

B is a residue of an amine-containing moiety or a residue of a hydroxyl-containing moiety;

b) deprotecting the resultant intermediate by removing B_2; and

c) reacting the deprotected intermediate with a compound of the formula

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$$\text{G}-(\text{C})_{\overline{n}}\overline{[\text{M}_1]_a}\left[\overset{\overset{Y_1}{\parallel}}{\underset{}{\text{C}}}\right]_b\left[\overset{\overset{R_1}{|}}{\underset{\underset{R_2}{|}}{\text{C}}}\right]_c\!\!-\text{B}_3 \qquad (V)$$

with R_7 above and R_8 below the $(C)_n$ group.

wherein

5   B_3 is a leaving group;

G is a polymer residue;

Y_1 is O, S, or NR_9;

M_1 is O, S, or NR_{10};

R_1, R_2, R_7, R_9 and R_{10} are independently selected from the group consisting

10   of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted

alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls

and substituted C_{1-6} heteroalkyls;

a, b and c are each independently zero or a positive integer,

whereby a polymeric conjugate is formed.

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26.   A method of preparing a polymeric conjugate, comprising:

a)   reacting a polymer-spacer intermediate of the formula

$$\text{G}-(\text{C})_{\overline{n}}\overline{[\text{M}_1]_a}\left[\overset{\overset{Y_1}{\parallel}}{\text{C}}\right]_b\left[\overset{\overset{R_1}{|}}{\underset{\underset{R_2}{|}}{\text{C}}}\right]_c\!\overline{[\text{M}_2]_d}\left\{\left[\overset{\overset{R_3}{|}}{\underset{\underset{R_4}{|}}{\text{C}}}\right]_e\!\overline{[\text{M}_3]_f}\right\}_g\left[\overset{\overset{R_5}{|}}{\underset{\underset{R_6}{|}}{\text{C}}}\right]_h\!\overline{[\text{M}_4]_i}\overset{\overset{Y_2}{\parallel}}{\text{C}}-\text{B}_1 \qquad (V)$$

20   with R_7 above and R_8 below the $(C)_n$ group.

wherein

B_1 is a leaving group capable of reacting with an unprotected amine or

hydroxyl group;

25   G is a polymer residue;

Y_1 and Y_2 are independently O, S, or NR_9;

M_1-M_3 are independently O, S, or NR_{10}.

M_4 is X or Q;

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wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from $C(=Y_2)$;

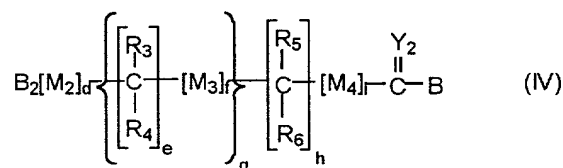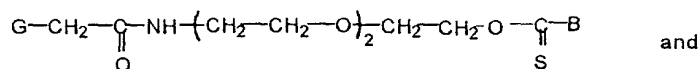B is a residue of an amine-containing moiety or a residue of a hydroxyl-containing moiety;

5   R_{1-10} are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls and substituted C_{1-6} heteroalkyls;
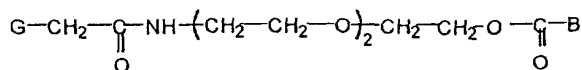
a, b, c, d, e, f, g, h, i and *n* are each independently zero or a positive integer
10   and thereafter reacting intermediate with a biologically active moiety having an unprotected amine or hydroxyl group to form the polymeric conjugate.

27.   A method of treatment, comprising:

administering to a mammal in need of such treatment an effective amount of a
15   compound of claim 1, wherein B is a residue of a biologically active moiety.

28.   A method of treatment, comprising:

administering to a mammal in need of such treatment an effective amount of a
compound of claim 3, wherein B is a residue of a biologically active moiety.

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29.   A compound of the formula:

$$B_2[M_2]_d\left\{\begin{bmatrix}R_3\\|\\C\\|\\R_4\end{bmatrix}_e - [M_3]_f\right\}_g \begin{bmatrix}R_5\\|\\C\\|\\R_6\end{bmatrix}_h - [M_4]_i - \overset{\overset{\displaystyle Y_2}{\|}}{C} - B \qquad (IV)$$

25   wherein

B is a residue of an amine-containing moiety or a residue of a hydroxyl-containing moiety;

B_2 is a cleavable protecting group;

Y_2 is O, S, or NR_9;

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M_2-M_4 are independently O, S, or NR_{10},

M_4 is X or Q;

wherein X is an electron withdrawing group and Q is a moiety containing a free electron pair positioned three to six atoms from $C(=Y_2)$;

$R_{3-6, 9 \text{ and } 10}$ are independently selected from the group consisting of hydrogen, C_{1-6} alkyls, C_{3-12} branched alkyls, C_{3-8} cycloalkyls, C_{1-6} substituted alkyls, C_{3-8} substituted cycloalkyls, aryls, substituted aryls, aralkyls, C_{1-6} heteroalkyls and substituted C_{1-6} heteroalkyls;

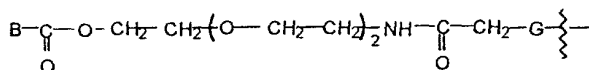d, e, f, g, h, and i are each independently zero or a positive integer.

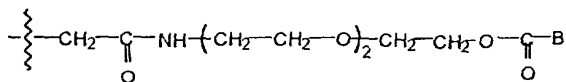30. A compound of claim 1, selected from the group consisting of:

and

31. A compound of claim 3, selected from the group consisting of:

and

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